# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF LOUISIANA

THE STATE OF LOUISIANA, By and through its Attorney General, JEFF LANDRY,

PLAINTIFFS,

CIVIL ACTION NO. 2:21-cv-00778-TAD

v.

JOSEPH R. BIDEN, JR., in his official capacity as President of the United States; et al.,

DEFENDANTS.

DECLARATION OF PROFESSOR DAVID E. DISMUKES

I, David E. Dismukes, declare as follows:

# **EDUCATION, EXPERIENCE, AND EXPERTISE**

- 1. I serve as Professor, Executive Director, and Director of the Policy Analysis at the Center for Energy Studies, Louisiana State University and Agricultural and Mechanical College ("LSU"). I am also a full Professor in the Department of Environmental Sciences and Director of the Coastal Marine Institute in the College of the Coast and Environment at LSU. I also serve as a full member of the graduate research faculty at LSU where I supervise and serve on graduate student theses and dissertation committees.
- 2. I serve as a Senior Fellow at the Institute of Public Utilities at the Michigan State University ("MSU") where I teach energy regulatory staff and other stakeholders about principles, trends, and issues in the electric and natural gas industries.
- 3. In addition to serving as a tenured LSU professor, I am also a Consulting Economist with the Acadian Consulting Group, LLC ("ACG"), a research and consulting firm that specializes in the analysis of regulatory, economic, financial, accounting, statistical, and public policy issues associated with regulated and energy industries. ACG is a Louisiana-registered partnership, formed in 1995, and is located in Baton Rouge, Louisiana.
- 4. I earned a Bachelor of Arts in History from the University of West Florida in 1987. I then earned a Master of Science in International Affairs in 1988, and a Master of Science in Economics

in 1992 from the Florida State University. Finally, I earned a Ph.D. in Economics in 1995, also from the Florida State University.

- 5. I have held academic appointments at LSU since 1995, including as a professor since 2006. I regularly teach courses at LSU on energy and the environment to undergraduate and graduate students.
- 6. My research at LSU includes the analysis of a wide range of issues related to energy and the environment in Louisiana. I am regularly called upon by the media, trade, civic, and professional associations to provide my opinion on energy and economic issues.
- 7. I have testified as an expert witness on energy issues on over 150 occasions. I have also testified before the U.S. Senate and the U.S. House of Representatives and several state legislatures.
- 8. I have authored several oil and gas industry "factbooks" that examine the detailed relationships of the offshore oil and gas industry in the Gulf of Mexico ("GOM") to onshore support industries and infrastructure. These factbooks are published by the U.S. Department of the Interior, Bureau of Ocean Energy Management ("BOEM").
- 9. I also co-author the "Gulf Coast Energy Outlook" or "GCEO" that examines the outlook for energy and the economy along the GOM. The GCEO is published annually by the LSU Center for Energy Studies.
- 10. I make this declaration in support of Plaintiffs' Motion for a Preliminary Injunction. This declaration is based on my personal knowledge, my review of cited materials, and my decades of experience in energy policy and analysis. I could and would competently testify to its contents if called to do so.
- 11. A true and accurate copy of my curriculum vitae, including my publications and testimony within the previous four years, is attached as Exhibit A.
  - 12. My academic year (9 month) salary as an LSU faculty member is currently \$162,932.
- 13. I am also receiving compensation for the study and testimony in this case through Acadian Consulting Group, LLC, which is being compensated at a rate of \$300 per hour for my services and \$55-\$285 for the services of my assistants.
  - 14. I am an expert in the analysis of economic, statistical, and public policy issues in energy

and regulated industries.

## HARM FROM LEASING AND DRILLING MORATORIUM

- 15. Louisiana will be harmed by the moratorium on new federal oil and gas leasing and drilling permits under Executive Order 14008 and other executive actions challenged in the complaint, such as Secretarial Order 3395, due to: (1) the reduction in oil production, economic activity, and state revenues resulting from the cancellation of the BOEM GOM Oil and Gas Lease Sale 257 and the suspension of BOEM GOM Lease Sales planned lease sales 259 and 261; (2) the reduction in oil production, economic activity, and state revenues due to foregone drilling under existing federal oil and gas leases; and (3) the reduced production by, and investment in, Louisiana's refining and chemical manufacturing industries caused by higher oil and gas prices.
- 16. The harm arising from the OCSLA Moratorium will be concentrated in the GOM region and Louisiana in particular, reflecting the concentration of crude oil and gas production from federal leases. The GOM accounts for a sizable level of U.S. production from federal leases. In 2019, GOM production accounted for 63.5 percent of all crude oil and 21.5 of all natural gas production arising from federal leases.<sup>1</sup>
- 17. The MLA Moratorium will also impact drilling in the Permian Basin, directly and immediately harming states like Louisiana and Texas in a number of different ways. First, labor in the oil and gas industry is highly mobile and Louisiana and Texas oil and gas workers are regularly employed in the Permian basin. A reduction in federal leasing in the Permian basin will lower oil and gas drilling and production employment opportunities for Louisiana and Texas oil and gas sector workers. Second, drilling reductions will ultimately result in lower production across all federal leases which in turn will increase the cost of crude oil and natural gas, holding other factors constant, thereby negatively impacting refining and petroleum-based chemical production activity in Louisiana and other places along the GOM and increasing costs across the United States.

#### HARM TO STATE REVENUES

18. The federal government earns revenues from oil and gas leases in the GOM from three sources: (1) the initial lease payments, known as bonus bids; (2) the royalties it collects on production

<sup>&</sup>lt;sup>1</sup> U.S. Office of Nat. Resources Revenue, https://bit.ly/2O29lKK.

from oil and gas leases, and (3) rentals.

- 19. Under the Gulf of Mexico Energy Security Act ("GOMESA"), 37.5 percent of all federal revenues from GOM oil and gas leases are shared between the four Gulf-producing States: Alabama, Louisiana, Mississippi, and Texas. Throughout calendar year 2020, Louisiana received \$156 million, or 44 percent, of the \$353 million in GOMESA Funds disbursed.<sup>2</sup>
- 20. The drilling moratorium will immediately harm Alabama, Louisiana, Mississippi, and Texas by reducing production and royalties from federal oil and gas leases in the GOM, reversing the upward trend in production seen in recent years.<sup>3</sup> This is in addition to state revenues from sales, income, and other taxes, which will also decline due to reductions in employment and economic activity supporting offshore oil and gas exploration and production and lower/less profitable refining and chemical manufacturing activities.
- 21. With the drilling moratorium, offshore GOM production will plateau and then decline in coming years as declining production from existing wells will no longer be offset by production from newly drilled wells. Declining production will result in similar declines in federal oil and gas royalties and Alabama, Louisiana, Mississippi, and Texas GOMESA funding.
- 22. The cancellation and suspension of GOM oil and gas lease sales will also reduce Alabama, Louisiana, Mississippi, and Texas GOMESA funding. The BOEM's most recent GOM leasing sale, conducted in November 2020, generated over \$120 million in bids which could generate up to \$19 million in GOMESA funds for Louisiana, based on its share of funds in 2020. Based on this figure, the cancellation of Lease Sale 257 and suspension of Sales 259 and 261 will reduce Louisiana's GOMESA funding by up to \$57 million.
- 23. Cancellation of Lease Sale 257 will imminently and directly harm all states located in the GOM region. In 2020, the Federal Office of Natural Resource Revenue ("ONRR") disbursed nearly \$95.3 million in GOMESA revenue to the State of Texas and Texas Counties. Similarly, in 2020

<sup>&</sup>lt;sup>2</sup> U.S. Office of Nat. Resources Revenue, "Gulf of Mexico Energy Security Act," https://bit.ly/3cNnynj; BOEM, "Gulf of Mexico Energy Security Act," https://bit.ly/2PaEZ8Y.

<sup>&</sup>lt;sup>3</sup> Production increased each year from 213-2019 before declining in 2020 largely due to the disruption caused by hurricanes and tropical depressions. *See* U.S. Energy Information Administration (EIA), "Petroleum & Other Liquids," https://bit.ly/2Nx5qFs; U.S. EIA, "Today in Energy" (Nov. 18, 2020), https://bit.ly/3s2YWgA.

<sup>&</sup>lt;sup>4</sup> BOEM, "Oil and Gas Lease Sale 256: Final Bid Recap" (Nov. 18, 2020), https://bit.ly/2Pdypys.

the ONRR disbursed more than \$50 million in total GOMESA revenue to the State of Alabama and Alabama counties, and more than \$51.9 million in total GOMESA revenue to the State of Mississippi and Mississippi counties.<sup>5</sup> The cancellation of Lease Sale 257 thus will significantly reduce GOMESA disbursements in 2021.

24. Based on BOEM estimates, the three cancelled or suspended GOM lease sales will result in an output loss of at least of 631.5 million barrels of oil production and 1,641 BCF of natural gas.<sup>6</sup> Assuming an average price of \$60 per barrel, federal oil and gas royalties would decline by over \$7 billion and Louisiana GOMESA funding would decline more than \$1 billion.<sup>7</sup>

## HARM TO COASTAL RESTORATION

- 25. Louisiana is situated in a hurricane-prone area of the country with vulnerable coastal terrain. Over the past 84 years, Louisiana has lost over 2,000 square miles of coastal wetlands, and forecasts anticipate up to 2,250 additional square miles could be lost over the next 50 years.<sup>8</sup>
- 26. In order to address the threat this continuing loss poses to Louisiana's coastal ecology, Louisiana communities are undertaking an ambitious effort to respond as set out in the 2017 Coastal Master Plan. The plan presents a long-term program of construction, operation, and maintenance of 124 projects over 800 square miles.<sup>9</sup>
- 27. The moratorium on leasing and drilling and cancellation of Lease Sale 257 will imminently harm Louisiana's coastline by depriving the State of GOMESA funding for the Coastal Master Plan. GOMESA has been a major source of funding for projects included in the Coastal Master Plan. For example, \$50 million in GOMESA funds have been committed to construct a permanent gate structure that will protect portions of six parishes from storm surges and flooding.<sup>10</sup>
  - 28. In Ascension Parish, GOMESA funds will pay \$65 million for a project that includes a

<sup>&</sup>lt;sup>5</sup> U.S. Office of Nat. Resources Revenue, "Gulf of Mexico Energy Security Act (GOMESA)," https://bit.ly/3w4w0rb.

<sup>&</sup>lt;sup>6</sup> BOEM, "2017-2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program," November 2016, 5-10, https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Leasing/Five-Year-Program/2017-2022/2017-2022-OCS-Oil-and-Gas-Leasing-PFP.pdf.

<sup>&</sup>lt;sup>7</sup> Based on the federal royalty rate of 18.5 percent, GOMESA's 37.5 percent share of federal royalties and Louisiana's 44 percent share of GOMESA funding.

<sup>&</sup>lt;sup>8</sup> State of Louisiana, "Louisiana's Comprehensive Master Plan for a Sustainable Coast" ES-2-7 (effective June 2, 2017), https://bit.ly/3tGMeo2.

<sup>&</sup>lt;sup>9</sup> *Id.* at ES-14-15.

<sup>&</sup>lt;sup>10</sup> U.S. DOI, "Interior Disburses \$353 Million in GOMESA Revenues for Gulf State Coastal Conservation and Hurricane Protection Projects" (Mar. 30, 2020), https://on.doi.gov/3cRMvOi.

pump station to be constructed on the Mississippi River at Donaldsonville. That pump station will triple the capacity for fresh water entering Bayou Lafourche to combat saltwater intrusion and provide fresh drinking water to over 300,000 residents in Assumption, Ascension, Lafourche, and Terrebonne Parishes.<sup>11</sup>

29. The moratorium on leasing and drilling will also negatively affect the State's economy and employment, limiting the State's ability to fund the Coastal Master Plan.

30. The Interior Department recently announced GOMESA distributions associated with fiscal year 2020 (October 2019 through September 2020). This included nearly \$110 million allocated to Louisiana state government and 19 coastal parishes in the State. 2020 fiscal year GOMESA distributions to all Gulf states were as follows:

• Louisiana: \$110 million;

• Texas: \$67.4 million;

• Mississippi: \$36.5 million;

• Alabama: \$35 million.<sup>13</sup>

31. 80 percent of GOMESA distributions allocated to Louisiana state government, or approximately \$88 million of the GOMESA fiscal year 2020 distribution, will be used to help fund productions included in the State's Costal Master Plan.<sup>14</sup>

32. Fiscal year 2020 GOMESA distributions are already approximately \$33.5 million lower than 2019 fiscal year distributions due to a drop in demand for oil and gas resulting from the COVID-19 pandemic.<sup>15</sup> This resulted in a reduction to Louisiana's GOMESA distributions of approximately \$14 million.<sup>16</sup>

33. Continued land loss along Louisiana's coast threatens valuable and critical energy infrastructure (such as natural gas pipelines, natural gas processing, pipelines that distribute gasoline and jet fuel to mid-Atlantic markets, tank storage facilities, among other assets) that in turn, impact

<sup>&</sup>lt;sup>11</sup> Id.

<sup>&</sup>lt;sup>12</sup> Schleifstein, Mark (March 30, 2021); "Louisiana gets \$110 million in offshore oil revenue; here's how it will be divided," The New Orleans Advocate.

<sup>&</sup>lt;sup>13</sup> *Id*.

<sup>&</sup>lt;sup>14</sup> *Id*.

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> *Id*.

U.S. and global energy markets and the U.S. economy.

#### HARM TO ECONOMIC ACTIVITY AND EMPLOYMENT

- 34. Louisiana's economy is dependent on oil and natural gas exploration and production not only because of its corresponding economic and employment activity but also because energy-based manufacturing industries located in the state rely on crude oil and natural gas, and their derivatives, as an input for these industrial processes.
- 35. A leasing and production moratorium will harm Louisiana's economy and workers. A moratorium will result in declining exploration and production activities on federal leases, reduced energy-based manufacturing, and ultimately reduced investment in the energy-based manufacturing equipment and facilities.
- 36. The GOM employs hundreds of thousands of workers, a large portion of which are concentrated in the coastal parishes of Louisiana. Drilling, production, and service sector oil and gas employees in Louisiana have been harmed and continue to be harmed by these executive actions.
- 37. Louisiana's energy-based manufacturing industries will also be negatively impacted by these actions since they are critical components of the region's overall manufacturing economy. Collectively, these industries make the following contributions:
  - In 2019, energy-based manufacturing accounted for \$6.8 billion in wages, representing 48 percent of Louisiana manufacturing wages.<sup>17</sup>
  - In 2019, energy-based manufacturing accounted for 15 percent of Louisiana's
    GDP for 75 percent of manufacturing.
  - Louisiana energy-based manufacturing wages are higher than the already above-average level of manufacturing wages.
- 38. Refineries, chemical plants, and other energy-based manufacturers in Louisiana have invested in more capacity and capabilities to take advantage of increased—and increasingly cost-effective—U.S. crude oil production. Historically, a large amount of the GOM production has gone to these Louisiana industries for further refining and processing. Increasing regional crude oil

<sup>&</sup>lt;sup>17</sup> Energy-based manufacturing includes: petroleum and coal products; chemical; and plastics and rubber products manufacturing. Analysis of Bureau of Economic Analysis, and U.S. Department of Commerce.

production in the GOM has been a large source of crude oil for many Louisiana refineries. Natural gas produced in the GOM is processed by several large facilities located in Plaquemines and St. Bernard parishes in Southeast Louisiana and Calcasieu and Cameron Parishes in southwestern Louisiana.

- 39. Over the past several years, increasing production from hydrofracking has become important to Louisiana even though much of that production is out-of-state. The Permian Basin is the largest crude oil producing region of the U.S. and half of this production comes from wells on federal lands in the New Mexico portion of the basin.<sup>18</sup> It has been estimated that the combined effect of the moratoriums on drilling and leasing will reduce Permian Basin production by 230,000-490,000 barrels in 2025.<sup>19</sup> To maintain production levels, GOM refineries would have to obtain similar, but more costly, light and super-light crude from other regions such as West Africa and the Arabian Gulf.<sup>20</sup>
- 40. Louisiana also has a growing energy export economy. Billions in investments have been made over the past several years to facilitate the movement of not only GOM production (crude oil and natural gas), but unconventional production from all over the U.S. including the Permian basin. These energy commodities are bound for export markets all over the world and within the United States. The moratorium harms United States ability to sustain anticipated commodity export levels. These exports leave liquified natural gas ("LNG") facilities in southwestern Louisiana and the Louisiana Offshore Oil Port ("LOOP") located in the central coastal portion of the state (near Port Fourchon).
- 41. Oil and gas workers tend to be very mobile, reflecting the nature of the work schedules. So the impact of reduced employment in oil and gas exploration and production offshore in the GOM and on federal lands in the Permian Basin will be felt throughout the region.
- 42. GOM offshore oil and gas support and services are concentrated in five Louisiana parishes: Iberia; Lafayette; Lafourche; St. Mary; and Terrebonne. Collectively, these parishes will be most affected by reductions in employment and economic activity due to reduced offshore oil and gas exploration and production.<sup>21</sup>

<sup>&</sup>lt;sup>18</sup> Garrett Golding & Kunal Patel, "Anticipated Federal Restrictions Would Slow Permian Basin Production," Federal Reserve Bank of Dallas (Mar. 4, 2021), https://bit.ly/3lx25Tk.

<sup>&</sup>lt;sup>19</sup> *Id*.

<sup>20</sup> Id

<sup>&</sup>lt;sup>21</sup> Joseph E. Aldy, The Labor Market Impacts of the 2010 Deepwater Horizon Oil Spill and Offshore Oil Drilling Moratorium,

- 43. In addition, reductions in U.S. natural gas production will reduce the opportunity for LNG exports, which will heavily impact LNG facilities in Southwestern Louisiana.
- 44. BOEM estimates that Louisiana accounted for 18 percent of economic output and 17 percent of employment generated by offshore GOM oil and gas activities, second only to Texas, which accounted for 40.5 percent of economic output and 38.8 percent of employment generated by offshore GOM oil and gas activities.<sup>22</sup> Drilling and completing a single well in the deepwater of the GOM can cost \$120 million, or more, depending on well and water depth.<sup>23</sup> Based on the BOEM estimates, Louisiana will lose \$21.5 million in economic output and 114 jobs for each deepwater well not drilled as a result of the executive actions.
- 45. State and local government revenues will also suffer from a halt in leasing, drilling, and permitting activities. A reduction in drilling and drilling support activities will, other things being constant, reduce the profitability of local businesses, thereby reducing corporate and other income tax collections. Reduced employment opportunities will likely reduce personal income tax revenues collected from oil and gas workers. Reduced economic activity will reduce sales tax collections. Other public revenues will suffer as well from the decreased offshore activity. Additionally, the significant rise in energy prices caused by the moratorium will make it more difficult for State and local governments to purchase affordable energy in their sovereign and municipal capacities.
- 46. The impact of the drilling and leasing moratorium comes at a time when pandemicrelated declines in demand for refined products have already put Louisiana and other GOM refineries at risk of closure.
- 47. The reduced supply of cost-competitive crude from the offshore GOM production and from federal oil and gas leases in New Mexico's portion of the Permian Basin will also reduce the incentive for refineries and chemical plants to continue operating in the near term and to make

Resources for the Future DP 14-27, at 9 (Aug. 2014), https://bit.ly/3c0QXuQ; "Estimating the Economic Effects of the Deepwater Drilling Moratorium on the Gulf Coast Economy," Inter-Agency Economic Report (Sept. 16, 2020), https://bit.ly/3eU83fX.

<sup>&</sup>lt;sup>22</sup> BOEM, "2017-2022 Outer Continental Shelf Oil and Gas Leasing Proposed Final Program," November 2016, 8-17, https://www.boem.gov/sites/default/files/oil-and-gas-energy-program/Leasing/Five-Year-Program/2017-2022/2017-2022-OCS-Oil-and-Gas-Leasing-PFP.pdf.

<sup>&</sup>lt;sup>23</sup> U.S. Energy Information Administration, "Trends in U.S. Oil and Natural Gas Upstream Costs" 26 (Mar. 2016), https://bit.ly/3m2AeLc.

investments in increased capacity and improved capabilities for the future.

I declare under penalty of perjury under the laws of the United States of America and the State of Louisiana that the foregoing is true and correct.

Executed in Baton Rouge, Louisiana this 31th day of March, 2021.

DAVID E. DISMUKES, PH.D.

David & Desmutes